#### THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 31

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS

AND INTERFERENCES

Ex parte JACQUES QUELLAIS
 and FRANCOIS GIRARD

Appeal No. 1997-1268 Application 08/319,096<sup>1</sup>

ON BRIEF

Before THOMAS, BARRETT, and LALL, <u>Administrative Patent</u> <u>Judges</u>.

BARRETT, Administrative Patent Judge.

<sup>&</sup>lt;sup>1</sup> Application for patent filed October 6, 1994, entitled "Multilayer Sole For Sport Shoes," which is a continuation of Application 07/995,083, filed December 22, 1992, now abandoned, which claims the foreign filing priority benefit under 35 U.S.C. § 119 of French Application 91 16275, filed December 24, 1991.

# **DECISION ON APPEAL**

This is a decision on appeal under 35 U.S.C. § 134 from the final rejection of claims 27, 29-36, and 38-41.

We reverse.

#### BACKGROUND

The disclosed invention is directed to a sport shoe comprising an outer sole made up of three layers performing distinct functions.

Claim 27, the sole independent claim, is reproduced below.

- 27. In a sport shoe comprising an upper, a sole made from a laminated profile comprising several layers performing distinct functions, respectively, said sole being surmounted by said upper, wherein said sole comprises at least three layers external to said upper, namely:
- (a) a ground contact layer with determinate properties of flexibility, gripping and abrasion-resistance which provide good foot extension, good ground traction and a high level of wear resistance;
- (b) an upper comfort layer located directly beneath the foot, said upper comfort layer having elastic shock-absorption properties and being assembled on said upper of said shoe; and
- (c) an intermediate layer of said sole, arranged directly between an upper part of said ground contact layer, by one of its faces, and the lower part of said comfort layer by its other face, having controlled torsional and flectional rigidity, and providing both

for the distribution of shockwaves and stresses sensed by said ground contact layer and for their diffusion over said comfort layer before coming in contact with the foot, said intermediate layer extending over an entire surface of said ground contact layer and constituting a framework for the ground contact layer preventing deformation of the ground contact layer and thereby permitting it to be made of softer, more adherent rubber.

The Examiner relies on the following prior art:

	Funck	4,399,620	August	23,
1983			_	
1007	Hannibal	4,651,445	March	24,
1987	Banich et al. (Banich)	4,694,591	September	22,
1987	,	, ,	_	,
	Barry et al. (Barry)	5,052,130	October	1,
1991				

Claims 27, 30, 34, 36<sup>2</sup>, and 38-41 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Barry and Hannibal.

Claims 29 and 31-33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Barry, Hannibal, and Banich.

Claim 35 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Barry, Hannibal, and Funck.

<sup>&</sup>lt;sup>2</sup> Since claim 36 depends from claim 29, it should be grouped with the rejection of claim 29.

We refer to the Final Rejection (Paper No. 21) (pages referred to as "FR\_\_") and the Examiner's Answer (Paper No. 28) (pages referred to as "EA\_\_") for a statement of the Examiner's position and to the Appeal Brief (Paper No. 27) (pages referred to as "Br\_\_") for a statement of Appellants' arguments thereagainst.

### **OPINION**

The claims are argued as standing or falling together with independent claim 27. Therefore, we examine the teachings of Barry and Hannibal applied to this claim.

Appellants admit "that Barry shows an outer sole (16) made of rubber, an intermediate layer (spring plate 20) having controlled torsional and flectional rigidity, and an upper comfort layer (18)" (Br3). As shown in figure 4, the spring plate 20 terminates a small amount from the front and heel ends of the midsole "to prevent the rather sharp edges of the plate from cutting anything or anyone, and to allow adequate adhesive area between the overlying midsole and the underlying outsole in these areas" (col. 4, lines 62-65).

"The spring plate is tapered down in the rear to extend primarily beneath the medial portion of the heel region, and

not significantly beneath the lateral portion of the heel region, leaving the lateral heel area with the lateral outsole portion directly in engagement with the midsole" (col. 2, lines 13-18) which "results in enhanced rear foot stability while maintaining shock absorption of the lateral heel portion of the midsole" (col. 2, lines 19-21). "If the plate extended beneath the outside, i.e., lateral area of the heel, the additional torsional stiffness would increase the rate and degree of pronation, increasing the potential for injury." (Col. 5, lines 8-11.)

Hannibal discloses a composite shoe sole having a multiple ply inner sole 30 at the top of a midsole 14 plus heel lift 20 and an outer sole layer 16.

Exhibit B attached to the amendment (Paper No. 20) filed August 25, 1995, illustrates the respective layer arrangements of the present invention (Quellais et al.) and the two references to Barry and Hannibal.

The Examiner reasons (FR5): "it would have been obvious to one having ordinary skill in the art to provide the sole construction of Barry et al. '130 with the sole plate of Hannibal in lieu of the sole plate disclosed

therein because such stability devices are art recognized equivalents and substituting one for the other provides the shoe of Barry et al. '130 with lateral stability in the rearfoot area and provides high compliance about the forward roll axis while reducing pronation, as taught by Hannibal."

Appellants argue that "the proposed combination is infeasible inasmuch as the two references contain inconsistent teachings, in that the intermediate layer (20) of Barry is in direct contact with the ground contact layer (16), whereas the composite layer (37) of Hannibal is remote from the ground contact layer (16)" (Br5).

We find no motivation in the references to do what the Examiner suggests. Barry teaches against having the spring plate 20 "extending over an entire surface of said ground contact layer" as claimed. Barry teaches that the spring plate should not extend to the edge at the front "to prevent the rather sharp edges of the plate from cutting anything or anyone, and to allow adequate adhesive area between the overlying midsole and the underlying outsole in these areas" (col. 4, lines 62-65). Barry teaches that the spring plate should not extend to the edge at the rear because "[i]f the

plate extended beneath the outside, i.e., lateral area of the heel, the additional torsional stiffness would increase the rate and degree of pronation, increasing the potential for injury" (col. 5, lines 8-11). The Examiner has not dealt with these teachings against doing what the Examiner proposes. For example, the Examiner states that extending the sole plate in Barry would reduce pronation, which contradicts Barry.

Although it might be said that it would have been obvious to one of ordinary skill in the art to extend the spring plate to the edges if one was not concerned with the factors mentioned by Barry, such analysis seems tinged with hindsight. It would seem that there should be margin between the spring plate and the edges at least to allow an adhesive area.

While it may be true that the inner sole 30 comprising a composite laminate in Hannibal is structurally similar to the spring plate 20 comprising the composite laminate in Barry, the different order of the layers in Hannibal makes it difficult to see how its teachings are applicable to modifying Barry. The biomechanics of the shoe are clearly

going to depend on the order of the layers. The composite laminate inner sole 30 is the top layer in Hannibal and clearly has to extend over the entire surface of the mid sole 18 and heel lift 20 to distribute forces thereover. Tn Barry, the midsole 18 is at the top and distributes forces over the composite laminate spring plate 20 and the outer sole 16. We do not find any motivation in Hannibal to place the composite laminate between the outer sole and the midsole as in Barry. Barry teaches that if the composite layer is between the outer sole and the midsole, it should not extend over the entire surface of the outer sole. Therefore, we are not persuaded that it would have been obvious to one of ordinary skill in the art to extend the spring plate 20 in Barry over the entire surface of the outer sole 16, just because Hannibal discloses three layers, each layer of which extend entirely over the layer below.

For the reasons stated above, we conclude that the Examiner has failed to establish a <u>prima facie</u> case of obviousness with respect to independent claim 27.

Accordingly, the rejection of claims 27, 30, 34, and 38-41 is reversed.

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Banich and Funck do not cure the deficiencies of Barry and Hannibal as to the rejection of claim 27. Accordingly, the rejections of claims 29, 31-33, 35, and 36 are reversed.

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# CONCLUSION

The rejections of claims 27, 29-36, and 38-41 are reversed.

### REVERSED

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JAMES D. THOMAS )
Administrative Patent Judge )

Administrative Patent Judge )

PATENT

LEE E. BARRETT ) APPEALS
Administrative Patent Judge ) AND
INTERFERENCES
)

PARSHOTAM S. LALL )
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